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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,641	02/16/2006	Zsolt Saffer	ATO20046	4535
24737 7590 04/15/2009 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER				
JACKSON, JAKIEDA R				
ART UNIT		PAPER NUMBER		
2626				
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04/15/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/568,641

**Applicant(s)**

SAFFER, ZSOLT

**Examiner**

JAKIEDA R. JACKSON

**Art Unit**

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE-US)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-12** are rejected under 35 U.S.C. 102(b) as being anticipated by De Bijl et al. (USPN 5,586,192), hereinafter referenced as De Bijl.

Regarding **claim 1**, De Bijl discloses a method (M) to detect a noise signal (PS1, PS2, PS3) in a digital audio signal (EAS), wherein:

the digital audio signal (EAS) (signal) is divided into successive signal sections (SAS) (performed successfully; column 2, lines 29—column 3, line 17);

the energy contents of successive signal sections (SAS) are determined (column 2, lines 29—column 3, line 17);

the energy contents (interference pulses) of a signal section (SAS) are evaluated in relation to an energy threshold (ET) (column 2, lines 29—column 3, line 17);

the occurrence of at least one high-energy signal section (larger) having an energy content above the energy threshold (ET), and the occurrence of at least one signal section (SAS) preceding (previous) the at least one high-energy signal section and having an energy content below the energy threshold (ET) (small), and the occurrence of at least one signal section (SAS) following (subsequent) the at least one

high-energy signal section and having an energy content below the energy threshold (ET) are detected (column 2, lines 29—column 3, line 17); and

a quantity of signal sections (SAS) that precede (previous) the at least one high-energy signal section (SAS) and a quantity of high-energy signal sections and a quantity of signal sections (SAS) that follow (subsequent) the high-energy signal section are counted (column 2, lines 29—column 3, line 17).

Regarding **claim 2**, De Bijl discloses a method wherein:  
the energy contents of a signal section (SAS) are determined in accordance with the formula

$$E = 10 \cdot \log_{10} \left( \frac{1}{N} \sum_{k=1}^N S_k^2 \right)$$
 (column 4, line 55 – column 5, line 28);

$S_{sub.k}$  represents the signal amplitudes within the signal section (SAS), and wherein  $N$  represents the total quantity of signal amplitudes within the signal section (SAS).

Regarding **claim 3**, De Bijl discloses a method, wherein the energy threshold (ET) is determined continuously from the digital audio signal (EAS) on the basis of a histogram method applied to the energy contents of the signal sections (SAS), taking account of a quickly changing background level and with the aid of a ratio between a useful-signal level (useful signal) and a noise level of the audio signal (EAS) (column 2, lines 13-17).

Regarding **claim 4**, De Bijl discloses a method wherein the signal sections (SAS) exhibit a signal-section duration (P) of between two milliseconds and ten milliseconds (signals above 53 kHz requires 5 milliseconds duration; column 3, lines 9-17).

Regarding **claim 5**, De Bijl discloses a method wherein each of the signal sections (SAS) exhibits a signal-section duration (P) of five milliseconds (signals above 53 kHz requires 5 milliseconds duration; column 3, lines 9-17).

Regarding **claim 6**, De Bijl discloses a method wherein:

it is established whether the energy contents of 1 successive high-energy signal sections exceed the energy threshold (ET), wherein 1 lies between 3 and 7 (4; column 4, line 50 – column 5, line 28);

it is established whether the energy contents of m successive signal sections (SAS) preceding the high-energy signal sections fall below the energy threshold (ET), wherein m is equal to or greater than 9 (16; column 4, line 50 – column 5, line 28); and

it is established whether the energy contents of n successive signal sections (SAS) following the high-energy signal sections fall below the energy threshold (ET), wherein n is equal to or greater than 30 (30; 4; column 4, line 50 – column 5, line 28).

Regarding **claim 7**, De Bijl discloses a method wherein:

it is established whether, subsequent to high-energy signal sections (subsequent), during signal sections (SAS) following these high-energy signal sections (large), which exhibit an energy content below the energy threshold (ET), further high-energy signal sections follow (column 2, line 29—column 3, line 17); and

the quantity of high-energy signal sections and the quantity of signal sections (SAS) which follow the further high-energy signal sections are counted (column 2, line 29—column 3, line 17).

Regarding **claim 8**, it is interpreted and rejected for similar reasons as set forth in claim 1.

Regarding **claim 9**, De Bijl discloses a device (1) wherein supply means (14), which are designed to supply a noise-signal-free audio signal (DASO), taking account of the detected noise signal (PS1, PS2, PS3), are provided (not identified as interference pulse; column 4, line 50 – column 5, line 28).

Regarding **claim 10**, DeBijl discloses a computer program product (27), which can be loaded directly into a memory (23) of a computer (19), and comprises software code sections, wherein the method (M) in can be implemented with the computer (19) when the computer program product (27) (program) is implemented on the computer (19) (processor; column 6, lines 52-64).

Regarding **claim 11**, De Bijl discloses a computer program product (27) (program), wherein the computer program product (27) is stored on a computer-readable medium (26) (column 6, lines 52-64).

Regarding **claim 12**, De Bijl discloses a computer (19) with a processor unit (24) (processor) and an internal memory (23), which implements the computer program product (27) (program; column 6, lines 52-64).

***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAKIEDA R. JACKSON whose telephone number is (571)272-7619. The examiner can normally be reached on Monday-Friday from 5:30am-2:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R Hudspeth/  
Supervisory Patent Examiner, Art Unit 2626

/Jakieda R Jackson/  
Examiner, Art Unit 2626  
April 12, 2009